

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.: 10/075,786
Applicant: John E. Holland et al.
Filed: February 13, 2002
TC/AU: 2831
Examiner: William H. Mayo III



Confirmation No. 9809

Docket No.: J3781-022 (24.1)
Customer No.: 26158

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

DECLARATION OF JOHN E. HOLLAND UNDER 35 U.S.C. 1.132

1. My name is John E. Holland and I am employed as President of JHRG, LLC ("JHRG"), assignee of the above-referenced patent application. My responsibilities include overall executive management of the company, overseeing production and sales. I am also a co-inventor of the invention claimed in the above-referenced pending U.S. patent application.

2. JHRG specializes in the production of engineered textiles with emphasis on high-performance fabrics. Our fabrics and products formed therefrom have been particularly successful commercially in the military engineered products market and in the commercial marine market. Each of the three principals (President, Vice President-Production, and Vice President-Sales) have had extensive careers within the textile industry.

3. JHRG is a small limited liability company (LLC) with 3 officers and an average of 35 employees. While one of the three officers has the title of Vice President-Sales, no personnel have sales responsibility specifically for our anti-chafe product. In addition to my duties as president, I personally perform sales functions for the entire product line, which includes the line of anti-chafe protective covers and sleeves.

4. One of the products offered by JHRG is an anti-chafe protective cover or sleeve, which is the commercial embodiment of the invention disclosed and claimed in the above-referenced patent application. Specifically, the protective covers or sleeves are formed of high performance yarns having a tensile modulus equal to or greater than 150 grams/denier and a tenacity of equal to or greater than 7 grams/denier. These anti-chafe protective covers are for use on electrical cables, hoses, ropes, and the like, and are particularly useful in environments in which the cables, etc. are subjected to abrasion, chemical exposure, saltwater, or extreme weather conditions.

5. JHRG first introduced the anti-chafe protective covers and sleeves in 2002.

6. Gross sales attributable to the anti-chafe protective covers and sleeves have been over \$380,000 since 2002.

While we understand that gross sales alone do not necessarily provide a complete picture of the success of our anti-chafe product, prior to Year 2002, JHRG was selling no protective covers for lengths of material such as ropes, hoses, cables, etc. in this relatively small market for similar products.

7. Prior to introduction of the anti-chafe cover, as claimed and described in the pending patent application, other protective sleeves and/or covers were being offered in the market for similar applications. For example, protective covers for the same environments, made of 1000 denier CORDURA® (nylon polymer) and similarly sized ballistic-grade nylon have been marketed for similar applications. CORDURA® fabric typically sells for about \$6.50 per linear yard (60 inches wide) and ballistic-grade nylon typically sells for about \$15.00 per linear yard (60 inches wide), depending upon the denier of the yarn used to form the fabric. In comparison, the SPECTRA® fabric used in our anti-chafe product sells for about \$60.00 per

yard. When used to construct the claimed protective covers, our anti-chafe covers sell for about \$180.00 per yard.

8. In terms of performance and service life, experience to date has shown that the anti-chafe covers and sleeves made from SPECTRA® fabric substantially and consistently outperform and outlast similar products made from CORDURA® or ballistic nylon. With respect to the degree of protection provided to the cables covered by CORDURA®, ballistic nylon, and the SPECTRA anti-chafe product, some specific examples are described below.

9. The anti-chafe covers have not been widely advertised. For the years 2002 – 2005, JHRG has spent less than \$50,000 promoting the anti-chafe covers and sleeves through trade shows, sales calls, and direct mail advertising. JHRG has not expended any money on print, radio or television advertising. Customers typically learn of the anti-chafe covers from “word-of-mouth” advertising.

10. Because of the substantial differences in cost, it took over two years (2002 and 2003) to convince potential customers that the anti-chafe protective covers and sleeves were worth the expenditure. Although the problem of chafing (wear and tear) in the transportation industry has been a long-standing concern and source of loss, it was simply not apparent, at first, to customers that this high-performance, high cost replacement product would better protect the cables, hoses, and ropes, tangibly save them from substantial replacement costs, prevent potential losses of their vessels and/or possible loss of life or serious injury.

11. Despite our limited sales and marketing activities, the anti-chafe sleeves and covers, as described and claimed in the pending patent application, have seen tremendous success in those industries that rely upon expensive lengths of rope, cordage, hoses, and cables, despite the higher price of our product as compared to other products being offered.

12. Included as Exhibit A is an excerpt from the January 2003 edition of nationally acclaimed SAIL Magazine, a trade magazine for sailing and maritime enthusiasts. As a tribute to SAIL's former technical editor, Freeman K. Pittman, the magazine conducts an annual search for products that embody innovation, exceptional quality, or both in the area of products for the nautical enthusiast. Technical consultants narrow down the search to those products worthy of being designated as the Freeman K. Pittman Editors' Choice selections. In the January 2003 edition, JHRG's protective sleeves, that are the subject of the instant patent application and the invention claimed therein, were one of the best new products chosen. As the excerpt notes, the product "...ain't cheap, but it sure works." Of note is that the technical consultant, the author of the excerpt, notes that he has spent time over the years using different wrappings (chafing gear) to protect his dock lines, none of which have solved the problem of chafing.

13. Included as Exhibit B is a copy of a press release from Samson Rope Technologies dated January 23, 2003 announcing that they have been named as the exclusive distributor of JHRG's anti-chafe products. Since 2003, Samson has been a major customer of these products.

As described in the excerpt of Exhibit B, and of particular significance to the commercial success of the claimed protective sleeve, Samson Rope Technologies has been recognized in the rope and cordage industry for over 100 years (since 1878) as a leader in developing and manufacturing braided ropes. Samson has been a leader in exploring new fiber and rope technologies and constructions to meet the demands of the marine and recreational boating industries, in particular. Prior to the introduction of our anti-chafe covers and sleeves, Samson purchased used fire hose to form anti-chafing gear over critical portions of its cordage and rope products. Interestingly, anti-chafing gear is needed to protect ropes made from nylon,

polyester, and polypropylene. Polyester is the material that was used to form the protective cover described in U.S. Patent No. 5,300,337 to Andrieu, the primary reference cited by the examiner in the pending application. While used fire hose may be purchased very cheaply, Samson now purchases our product at a significantly higher price (~ \$60.00 per linear foot for our anti-chafe covers and sleeves versus \$1.00 per linear foot for used fire hose).

14. Included as Exhibit C is a letter dated September 17, 2002 from Titan Maritime, LLC. ("Titan") Titan is an internationally-renowned salvage and wreck recovery company that operates in extremely remote, harsh, and difficult environments. As indicated in the letter, Mr. Gage Parrot of Titan notes that Titan is faced with the serious problems of wear and tear in their daily operations, resulting in frequent umbilical, rig, hose, and line replacement. While Titan has tried other types of anti-chafe products, also including fire hose, these products have failed to provide the required degree of protection. Again, the claimed protective sleeves are "not inexpensive", however, they have proven "cost effective and superior."

15. Included as Exhibit D is a letter dated December 18, 2003 from Mr. Brad Gunn, Captain of the Schooner Downeast Rover. The Downeast Rover is a 55 foot commercial charter schooner certified for 29 passengers. As evidenced in the letter, the high-strength, high-performance material was in service during extreme hurricane conditions to protect synthetic nylon piling lines, yet experienced no visible wear.

16. Exhibits E and F provide additional evidence of the commercial success of the claimed anti-chafe covers by commercial enterprises. Exhibit E is illustrative of the recognition that the product has gained by experienced/expert users in the industry over other attempted anti-chafe constructions. As noted in Exhibit E, Mr. Mike Ring, VP/General Manager of McAllister

Towing of Florida states that the product is "...the best piece of chafe gear I've seen in 30 years in the business."

17. In addition to the exemplary sales described above, JHRG has also sold, and continues to sell, in increased quantities, the claimed protective covers to the United States Government. More specifically, the United States Navy and United States Coast Guard, with centuries of cumulative experience, have recognized the success of JHRG's protective covers and sleeves over prior anti-chafe products for use in the defense industry. Specifically, JHRG has sold the product for use on the following United States vessels:

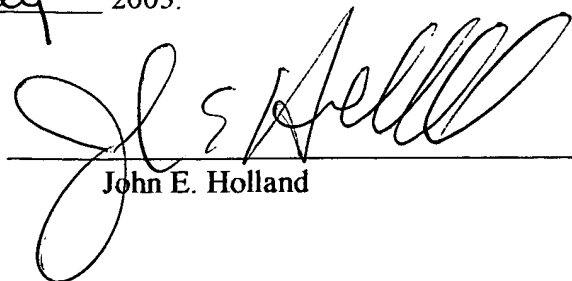
USCGC Yellowfin	USCGC Cochito	USCGC Harriet Lane
USCGC Kennebec	USCGC Tarpon	USN SBT22
USS Cape St. George	USS Donald Cook	USS Gonzalez
USS Ramage	USS Ross	USNS Comfort
USNS John Lenthall	USNS Walter S. Diehl	USS Benfold
USS Blackhawk	USS Doyle	USS Harry Truman
USS Hurricane	USS Mobile Bay	USS Salvor
USS Stout	USS Tortuga	USCGC Hickory

As those skilled in the art and knowledgeable in the industry will attest, procurement by the United States Government is not based on advertising or marketing; rather, procurement is based on bona fide need coupled with evaluation of a product against existing products designed for the same purpose. For example, we understand that the USCGC Hickory that is stationed in Alaska began using our anti-chafe product following a tidal surge that chafed a stern line, resulting in failure of the line and more than \$3,000,000 damage to the pier/dock. The rise and fall of the tide in that location is more than 30 feet, which makes chafing of lines a significant issue. As evidenced from the list above, the United States Navy has accepted and purchased this product for use on, among other vessels, its destroyers and cruisers, because our anti-chafe product outperforms all other products on the market for similar purposes.

18. Another problem in the commercial maritime industry with previous anti-chafe devices has been the adverse interaction between materials. For example, in a commercial application, particularly when mooring/docking line movement is more than minimal, a great deal of friction is created between the mooring lines and any material with which the lines are in contact (such as covers or sleeves). This friction is great enough that protective coverings previously known, made of polyester and nylon, will melt or burn. This was particularly evident during the last hurricane season of 2004. JHRG's anti-chafe protective cover, however, showed no signs of abrasion, burn, or melt. When SPECTRA® yarn is woven into the protective sleeve of our claimed invention, the inner surface (against the protected line) of the fabric is relatively slick. Unexpectedly, when this slick surface characteristic is combined with the high strength of the fabric itself, there is minimal friction and minimal heat build up. As a result, the fabric is not damaged due to wear under these extreme conditions.

I hereby declare that all statements made herein of my own knowledge are true and that any statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

This is the 24th day of May 2005.



John E. Holland